

Condensed Survey Results for the Interior Plateau (Region 5)

I. *Threats to habitats in the Interior Plateau (Region 5)*

Criteria for inclusion: The following **categories** of threats and **specific threats** were identified as “significant” or “moderate.” The percentages listed below are the combined proportion of respondents indicating these threats as “significant” or “moderate,” excluding those who answered “I don’t know.” Threats and categories listed below were rated in these categories by greater than 50% of respondents across habitat types in this region.

Residential and Commercial development: <i>Threats from human settlements or other nonagricultural land uses with a substantial footprint</i>				79.9%	107	
Housing and urban areas				84.8%	89	Increase
Commercial and industrial areas				77.6%	76	Increase
Tourism and recreation areas (e.g., sites with a substantial footprint – golf courses, campgrounds, etc.)				40.6%	41	Increase
Invasives and other problematic species and genes: <i>Threats from non-native and native plants, animals, pathogens/microbes, or genetic materials that have or are predicted to have harmful effects on biodiversity following their introduction, spread, and/or increase in abundance</i>				77.7%	101	
Invasive/alien species				96.9%	95	Increase
Problematic native species (e.g. overabundant native deer or algae)				64.6%	62	Increase
Plant diseases				60.0%	51	Increase
Introduced genetic material (such as crop, seed stock, biocontrol, stocked/released species, etc.)				47.5%	38	Increase
Agriculture and aquaculture: <i>Threats from farming and ranching as a result of agricultural expansion and intensification, including silviculture, mariculture, and aquaculture</i>				70.2%	92	
Conversion of habitat to annual crops				82.6%	71	Increase
Annual and perennial nontimber crops				67.0%	59	Remain the same
Livestock farming and ranching				64.3%	54	Remain the same
Wood and pulp plantations				36.8%	28	Remain the same
Aquaculture				10.5%	6	Remain the same
Natural systems modifications: <i>Threats from human activities that alter, destroy, and disturb habitats and species associated with nonconsumptive uses of biological resources</i>				63.2%	79	
Conversion of natural habitats to other land uses				96.2%	76	Increase
Dams and water management/use				56.8%	42	Remain the same
Fire and fire suppression				46.6%	34	Remain the same
Over-mowing of natural areas				40.8%	29	Remain the same
Log jam removal				28.2%	20	Remain the same
Pollution: <i>Threats from introduction of exotic and/or excess materials or energy from point and nonpoint sources</i>				61.9%	78	
Agriculture, residential, and forestry effluents				82.9%	63	Increase
Runoff from roads/service corridors				71.1%	54	Increase
Point source pollution from commercial/industrial sources				71.1%	54	Remain the same

Air pollution (e.g., smoke, mercury emissions)	70.8%	51	Increase
Household sewage and urban water waste	65.8%	50	Increase
Garbage and solid waste	61.1%	44	Increase
Chemical spills	55.4%	41	Remain the same
Excess energy (e.g., noise/light pollution, warm water discharge, etc.)	52.8%	38	Increase
Human intrusion and disturbance: <i>Threats from human activities that alter, destroy, and disturb habitats and species associated with nonconsumptive uses of biological resources.</i>			
Recreation activities (e.g., ATVs, trail use, horseback riding, high-speed boating, canoeing)	67.5%	52	Increase
Transportation and service corridors: <i>Threats from long, narrow transport corridors and the vehicles that use them, including associated wildlife mortality</i>			
Roads and railroads	85.1%	57	Increase
Utility and service lines	55.7%	39	Remain the same
Shipping lanes	21.3%	13	Remain the same
Flight paths	16.1%	10	Remain the same
Other stressors: <i>Additional threats and stressors directly affecting habitats, such as diseases and genetic diversity issues</i>			
Diseases	94.9%	37	Increase
Low genetic diversity (due to reduced population size, species inbreeding, etc.)	71.7%	33	Increase
Climate change and severe weather: <i>Long-term climactic changes that may be linked to global warming and other severe climactic or weather events outside the natural range of variation that could wipe out vulnerable species or habitat.</i>			
Changing frequency, duration, and intensity of drought	96.6%	56	Increase
Changing frequency, duration, and intensity of floods	89.3%	50	Increase
Shifting and alteration of habitats due to climate change	87.9%	51	Increase
Shifting seasons/phenology	87.7%	50	Increase
Temperature extremes	81.0%	47	Increase
Energy production and mining	40.5%	51	
Fossil fuel energy production	87.5%	42	Increase
Shale gas development (e.g., fracking)	85.1%	40	Increase
Mining and quarrying	78.0%	39	Increase
Oil and gas drilling	70.8%	34	Increase
Renewable energy production	46.7%	21	Remain the same
Energy production and mining: <i>Threats from production of nonbiological resources</i>			
Fossil fuel energy production	87.5%	42	Increase
Shale gas development (e.g., fracking)	85.1%	40	Increase
Mining and quarrying	78.0%	39	Increase
Oil and gas drilling	70.8%	34	Increase
Renewable energy production	46.7%	21	Remain the same
Biological resource use: <i>Threats from consumptive use of “wild” biological resources including deliberate and unintentional harvesting effects; also persecution or control of specific species</i>			
Forestry practices (e.g., silvicultural methods leading to the lack of early successional habitat)	89.5%	34	Increase

II. Conservation actions for habitats in the Interior Plateau (Region 5)

Criteria for inclusion: The following **categories** of actions and **specific actions** were identified as “very important” or “moderately important.” The percentages listed below are the combined proportion of respondents indicating these actions as “very important” or “moderately important,” excluding those who answered “I don’t know.” Actions and categories listed below were rated in these categories by greater than 50% of respondents across habitat types in this region.

Land/Water/Species Management: Actions directed at conserving or restoring sites, habitats, and the wider environment as well as actions directed at managing or restoring species, focused on the species of concern itself.			87.3%	110
1.	Restore and integrate diversity of habitats into developed landscapes	100.0%	6	
2.	Reduce losses of fish and wildlife habitats (due to agriculture, urban sprawl, commercial development, etc.)	93.5%	101	
3.	Restore and integrate diversity of habitats into crop-production dominated landscapes	93.3%	14	
4.	Restore habitats and natural systems in HABITAT	92.1%	82	
5.	Restore habitats and natural systems in grasslands	100.0%	7	
6.	Restore habitats and natural systems in wetlands	100.0%	10	
7.	Restore habitats and natural systems in forests	94.1%	32	
8.	Restore habitats and natural systems in aquatic systems	90.5%	19	
9.	Restore habitats and natural systems in barren lands	90.0%	9	
10.	Restore habitats and natural systems in subterranean systems	71.4%	5	
11.	Reduce stream bank erosion	90.5%	19	
12.	Promote diversity of wetland types and successional stages	90.0%	9	
13.	Protect adjacent buffer zones	89.6%	43	
14.	Promote diversity of forest types and successional stages	88.2%	30	
15.	Increase acres of riparian buffers	85.7%	6	
16.	Promote diversity of grassland types and successional stages	85.7%	6	
17.	Reduce stream head cutting	85.0%	17	
18.	Control invasive species in HABITAT	84.4%	92	
19.	Control invasive species in forests	91.2%	31	
20.	Control invasive species in agricultural lands	85.7%	12	
21.	Control invasive species in aquatic systems (e.g., Asian carp, zebra mussels, invasive aquatic plants)	85.7%	18	
22.	Control invasive species in subterranean systems	85.7%	6	
23.	Control invasive species in developed lands	83.3%	5	
24.	Control invasive species in barren lands	80.0%	8	
25.	Control invasive species in wetlands	80.0%	8	
26.	Control invasive species in grasslands	57.1%	4	
27.	Reestablish natural disturbance regimes in HABITAT	83.6%	46	
28.	Reestablish natural disturbance regimes in barren lands	90.0%	9	
29.	Reestablish natural disturbance regimes in grasslands	85.7%	6	
30.	Reestablish natural disturbance regimes in forests	85.3%	29	
31.	Reestablish natural disturbance regimes in subterranean systems	50.0%	2	
32.	Reestablish natural disturbance regimes in wetlands	0.0%	0	
33.	Manage urban woodlots	83.3%	5	
34.	Link existing habitat blocks through corridor enhancement in HABITAT	81.7%	89	
35.	Link existing habitat blocks through corridor enhancement in developed lands	100.0%	6	
36.	Link existing habitat blocks through corridor enhancement in aquatic systems	90.5%	19	
37.	Link existing habitat blocks through corridor enhancement in barren lands	90.0%	9	
38.	Link existing habitat blocks through corridor enhancement in agricultural lands	86.7%	13	
39.	Link existing habitat blocks through corridor enhancement in forests	85.3%	29	
40.	Link existing habitat blocks through corridor enhancement in wetlands	70.0%	7	
41.	Link existing habitat blocks through corridor enhancement in grasslands	57.1%	4	
42.	Enhance corridors in subterranean systems	33.3%	2	
43.	Develop and promote farming technologies and practices that have conservation benefits (e.g., cover crops, no till)	80.7%	88	
44.	Increase acres enrolled in the Classified Forest and Wildlands Program	79.6%	86	

45.	Reduce nutrient and toxin loads (e.g., heavy metals, pharmaceuticals, fertilizers, insecticides)	78.5%	84
46.	Decrease number of combined sewer overflow events	77.4%	24
47.	Protect natural water regimes (e.g., withdraws, warm-water discharge)	74.2%	23
48.	Protect and enhance undeveloped shorelines	72.4%	21
49.	Improve integrated pest management	64.3%	9
50.	Improve drainage management	62.4%	63
51.	Control problematic native species in HABITAT	60.6%	66
52.	<i>Control problematic species (e.g., deer, raccoon, domestic cat, feral hog) in forests</i>	73.5%	25
53.	<i>Control problematic species (e.g., deer, raccoon, skunk, coyote, domestic cat, feral hog) in barren lands</i>	70.0%	7
54.	<i>Control problematic species (e.g., deer, raccoon, geese, domestic cat, feral hog, exotic/aggressive vegetation) in developed lands</i>	66.7%	4
55.	<i>Control problematic native species in subterranean systems</i>	66.7%	4
56.	<i>Control problematic species (e.g., deer, raccoon, geese, domestic cat, feral hog) in agricultural lands</i>	60.0%	9
57.	<i>Control problematic native species in aquatic systems</i>	57.1%	12
58.	<i>Control problematic species (e.g., deer, raccoon, domestic cat, feral hog, exotic/aggressive vegetation) in wetlands</i>	40.0%	4
59.	<i>Control problematic species (e.g., raccoon, skunk, coyote, domestic cat) in grasslands</i>	14.3%	1
60.	Decrease E. coli counts	60.0%	18
61.	Mine reclamation	59.8%	52
62.	Species reintroduction. Please specify:	59.1%	13
63.	Reduce recreational overuse of HABITAT	47.4%	36
64.	<i>Reduce recreational overuse of subterranean systems</i>	85.7%	6
65.	<i>Reduce recreational overuse of forests</i>	51.6%	16
66.	<i>Reduce recreational overuse of wetlands</i>	50.0%	5
67.	<i>Reduce recreational overuse of aquatic systems</i>	38.1%	8
68.	<i>Reduce recreational overuse of grasslands</i>	14.3%	1
69.	Manage biofuel grasslands	38.1%	8
70.	Ex situ conservation (protection of a species outside of its natural habitat). Please specify:	34.2%	26
71.	Dam removal	33.3%	10
72.	Remove log jams	33.3%	7
Land/Water Protection: Actions to identify, establish, or expand parks and other legally protected areas, and to protect resource rights		86.9%	113
73.	Acquire currently unprotected HABITAT	89.0%	81
74.	<i>Acquire currently unprotected aquatic systems (manage and/or educate for easement habitat values)</i>	82.6%	19
75.	<i>Acquire currently unprotected barren lands</i>	88.9%	8
76.	<i>Acquire currently unprotected forests</i>	90.0%	27
77.	<i>Acquire currently unprotected grasslands</i>	87.5%	7
78.	<i>Acquire currently unprotected wetlands</i>	100.0%	11
79.	<i>Acquire currently unprotected subterranean habitats</i>	90.0%	9
80.	Preserve currently existing corridors	90.2%	101
81.	Acquire conservation easements to protect important wildlife habitats	92.9%	104
82.	Reduce conversion to cropland	81.1%	90
83.	Build/strengthen CRP partnerships	84.0%	89
Education and Awareness: Actions directed at people to improve understanding and skills, and influence behavior.		77.9%	102
84.	Training programs for stakeholders	91.8%	90
85.	Educational programs in general	91.1%	92
86.	Educational programs specifically for K-12	88.2%	90
87.	Improvement of signage and other communication materials in conservation areas	62.4%	63
Livelihood, economic, and other incentives: Actions to use economic and other incentives to influence behavior		68.6%	83
88.	Promote nonmonetary values of natural systems within the state	86.4%	70

89.	Promote conservation payment programs (e.g., payment for ecosystem services, conservation easements)	85.4%	70
90.	Manage recreational opportunities to be compatible with fish and wildlife habitats	84.0%	68
91.	Support substitution of alternatives for environmentally harmful products and processes	71.8%	56
92.	Promote market forces (e.g., creation of a nitrogen trading market, promotion of alternative agricultural markets) as a tool for conservation	60.8%	48
93.	Link natural resources to livelihoods through nature tourism	57.8%	48
Law and policy: Actions to develop, change, influence, and help implement formal legislation, regulations, and voluntary standards.		66.7%	82
94.	Increase compliance of existing rules and regulations for aquatic systems	94.1%	16
95.	Improve compliance with and enforcement of current policies	89.9%	71
96.	Reduce urban sprawl through planning and zoning	86.4%	70
97.	Change current laws, policies, and regulations. Please specify:	84.0%	42
98.	Increase regulations on invasive species	82.5%	66
99.	Set private sector standards and codes	80.3%	61
100.	Establish submergent vegetation control guidelines	76.5%	13
101.	Establish rules and guidelines for piers and other structures	56.3%	9
102.	Establish legal lake levels	46.7%	7
External capacity building: Actions to build the infrastructure to do better conservation		58.3%	63
103.	Promote use of research and science in conservation decision-making processes	95.1%	58
104.	Develop alliances and partnerships (e.g., between producers, landowners, and conservation professionals)	91.9%	57
105.	Increase state's capacity for research and monitoring of conservation actions	90.3%	56
106.	Strengthen conservation financing	88.9%	56
107.	Promote green infrastructure	82.3%	51
108.	Develop institutions and civil society	66.7%	32

III. Participation in conservation actions for habitats in the Interior Plateau (Region 5)

Criteria for inclusion: Respondents were asked if their agency/organization had acted or plans to take action in a general category of conservation actions within this region. "I don't know" responses to this question were excluded for this analysis. Responses were aggregated across all habitat types.

Have you taken (since 2005) or do you currently plan to take conservation actions in this category for fish and wildlife habitats within HABITAT in the Valleys and Hills (Region 4)?

	Yes		No		Total Responses
	%	N	%	N	
Land/water protection	80.0%	80	20.0%	20	97
Land/water/species management	78.4%	76	21.6%	21	100
Education and awareness	78.2%	79	21.8%	22	101
Law and policy	32.5%	26	67.5%	54	76
Livelihood, economic, and other incentives	57.9%	44	42.1%	32	80
External capacity building	36.8%	25	63.2%	43	68